

REMARKS

Examiner's Rejections and Objections

The foregoing Amendment and remarks which follow are responsive to the Office Action mailed January 2, 2004. In that Office Action, the Examiner rejected Claims 1, 2, 4, 8, 11, 12, 21, 22, 25, 29, 30, 35 and 36 under 35 U.S.C. §102(b) as being anticipated by the Patel reference ("Patel"). The Examiner also rejected Claims 5-7, 10, 13-16, 23, 26-28, 31-33, 37-39, 40 and 41 under 35 U.S.C. §103(a) as being unpatentable over Patel. The Examiner additionally rejected Claims 9 and 34 under 35 U.S.C. §103(a) as being unpatentable over Patel in view of the Cheung et al. reference ("Cheung").

Further in that Office Action, Claims 17-19 and 44 were rejected under 35 U.S.C. §103(a) as being unpatentable over Patel in view of the Spall et al. reference ("Spall"). Claims 20 and 45 were further rejected under 35 U.S.C. §103(a) as being unpatentable over Patel in view of the Puthuff and Jarger references ("Puthoff" and "Jarger", respectively). Lastly, the Examiner rejected Claims 24 and 46 under 35 U.S.C. §103(a) as being unpatentable over Patel in view of the Dennison et al. reference ("Dennison").

Importantly, the Examiner indicated that Claims 47-66 are allowed as they currently stand.

Further importantly, even though Claims 42 and 43 were objected to as being dependent upon a rejected base claims, the Examiner indicated that those claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Amended Independent Claim 29

Applicant has amended independent Claim 29 to incorporate the substance of allowable dependent Claim 42. In this respect, Applicant respectfully submits that amended base Claim 29 is now allowable. Dependent Claims 30-41 and 44-46 are further limitations of the amended base Claim 29. Insofar as the amended base Claim 29 is believed to be allowable, its dependent Claims 30-41 and 44-46 are also believed to be allowable.

New Independent Claim 67

Applicant has added independent Claim 67 which incorporates the substance of allowable dependent Claim 43. Applicant respectfully submits that new base Claim 67 is thus allowable.

Amended Independent Claim 1

Applicant sets forth below its arguments for amended base Claim 1 in a numerical order in hopes of clarity and assisting the Examiner in facilitating the prosecution of the subject

patent application. In this regard, Applicant hopes to lay out the distinctions between the present invention (as recited in new base Claim 1) and the relevant prior art references cited thereagainst, namely, Patel and Spall.

1. The Present Invention Recited In Amended Base Claim 1

Applicant has amended independent Claim 1 to incorporate features which are believed to be novel and unobvious over the relevant prior art references, namely, Patel and Spall.

More specifically, amended independent Claim 1 essentially incorporates slightly broader concepts of allowable dependent Claims 42 and 43. The communication system of the present invention, as reflected in amended base Claim 1, features "a thin flexible sheet having an antenna embedded therewithin and being pivotally connected to the edge of the at least one device, the sheet being pivotable substantially adjacent the edge to alternate between folded and unfolded positions, the sheet being generally coplanar with the at least one device when in the folded position, the sheet being generally angularly displaced from the at least one device when in the unfolded position, wherein the sheet is deployable to the unfolded position to facilitate communication between the at least one wireless communications device and the base station."

In particular, the present invention as reflected in amended independent Claim 1 is directed toward a miniaturized

communication system featuring a single forward channel transmitter base station. The communication system of the present invention additionally features one or more wireless communications devices which are designed to communicate with the base station. Such wireless communications devices are substantially the same size as the conventional credit cards that are being used today.

Importantly, each of the wireless communications devices are uniquely structured and have unique methods in accommodating and deploying their antennas used for communicating with their respective base stations. Rather than resorting to the use of a traditional antenna which extends outside and retracts inside its respective communicating device, a thin flexible sheet is pivotally connected substantially along an edge, or substantially about one point of the edge, of the present invention's wireless communications device. By establishing such pivoting connection, the thin flexible sheet is allowed to pivot about its connected edge so that it may be folded (position in which the sheet is generally coplanar with the communications device) and unfolded (position in which the sheet is generally angularly displaced from the communications device) with respect to the wireless communications device.

More particularly, an antenna is embedded within such thin flexible sheet. In this respect, the antenna may be deployed by

unfolding the flexible sheet from the wireless communications device when communication with the base station needs to be established. Upon ending such communication, the thin flexible sheet may be manually folded about its connected edge so that the present wireless communications device returns to its compact size.

As will be demonstrated below, such foldable/unfoldable thin flexible sheet for selectively deploying an embedded antenna is not taught, suggested or even implied by its prior art of relevance, namely, Patel and Spall. As such, Applicant feels that such recitation of elements, along with other enumerated elements of amended base Claim 1, will be sufficient to patentably distinguish the present invention over the cited prior art.

2. Patel In View of the Present Invention

Even though the Patel reference is generally directed toward a communication system, it is not understood to disclose the present invention's specific combination of elements as recited in amended independent 1.¹ More particularly, among

¹As is well-known, anticipation cannot be established unless a single prior art reference discloses each and every element of the claimed invention. Structural Rubber Co. v. Park Rubber Co., 749 F.2d 707, 223 U.S.P.Q. 1264 (Fed. Cir. 1984). Further, for anticipation to apply, all of the claimed elements must be found in exactly the same situation and united in the same way to perform the identical function in a single unit of the prior art. (See, e.g., Studiengesellschaft Kohle m.b.H. v. Dart

others, Applicant respectfully submits that Patel fails to teach or suggest the instantly claimed foldable/unfoldable thin flexible sheet for selectively deploying an embedded antenna.

At best, Patel is understood to disclose that that its transmitter and receiver circuits are connected to a microprocessor for message transmission and reception "using external antenna 72" or "using an internal antenna 102." (Column 10, line 50; Column 11, lines 63-64). Applicant submits that this is the extent of Patel's disclosure as to the structure and operation of its antenna. Simply put, Applicant believes that there is no disclosure in Patel which teaches, or even closely analogizes to, a flexible thin sheet that can fold and unfold with respect to the wireless communications device's edge in order to selectively and strategically deploy an antenna embedded therewithin. As such, it is respectfully submitted that Patel fails to anticipate such feature of the present invention.

3. Spall In View of the Present Invention

Industries, 762 F.2d 724, 726, 220 U.S.P.Q. 841, 842 (Fed. Cir. 1984)). Even further, any inherency which is applied in the context of anticipation "does not embrace probabilities or possibilities." Trintec Industries Inc. v. Top-U.S.A. Corp., 63 U.S.P.Q.2d 1597, 1601 (Fed. Cir. 2002) (holding of no express or inherent anticipation in a scenario where a catalog taught printing methods but not "creating" anything in a computer as the latter was not disclosed therein).

It appears that the only other reference that the Examiner has cited in the Office Action for disclosing the present invention's unique antenna system is the Spall reference. In this regard, Applicant wishes to discuss Spall in this section so as to avoid any potential piecemeal prosecution.

Similar to Patel, Applicant respectfully submits that Spall also fails to disclose the instantly claimed foldable/unfoldable thin flexible sheet for selectively deploying an embedded antenna. Rather, Applicant understands Spall to substantially follow the traditional structure and method of deploying its antenna, as commonly seen in many of today's cellular phones. More specifically, Spall is believed to be wholly directed to "a radiotelephone 10 which includes a retractable antenna system 20." (Column 5, lines 8-9). Such system is said to be comprised of "an antenna 22 and an extendible, non-radiating feed 30." (Column 5, lines 32-33).

By such configuration, Spall states that its "extendible feed 30 is slidably movable along a vertical axis which runs both within, and external to, housing 50." (Column 6, lines 10-12). In particular, "when antenna 22 is in the extended position, feed 30 is extended so that it is nearly completely external to housing 50." Spall states that "when antenna 22 is in the retracted position, feed 30 is located almost completely within housing 50, so that antenna 22 appears as a

conventionally mounted (i.e., non-retractable) antenna when retracted." (Column 6, lines 15-19). This is the extent of its teaching, and nowhere in Spall has Applicant identified any disclosure about a flexible thin sheet that can fold and unfold with respect to the wireless communications device's edge in order to selectively and strategically deploy an antenna embedded therewithin. Put simply, Applicant respectfully submits that Spall also fails to anticipate such feature of the present invention.

Therefore, it is respectfully submitted that none of the cited prior art references, namely, Patel and Spall, discloses a flexible thin sheet which is designed to fold and unfold with respect to the wireless communications device's edge for selectively and strategically deploying an antenna that is embedded therewithin. In this respect, it is further respectfully submitted that even when those references are combined, such emphasized feature of the present invention is not disclosed by the prior art references.

Applicant further makes the contention that although the prior art fails to disclose or make it obvious the unique antenna feature of the present invention, Applicant respectfully submits that the disfavored hindsight construction of the two cited references cannot be maintained. More specifically, the United States Court of Appeals for the Federal Circuit, in

overturning a ruling by the Board of Patent Appeals and Interferences, held that "[W]hen a rejection depends on a combination of prior art reference, there must be some teaching, suggestion, or motivation to combine the references."² In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998) (citing In re Geiger, 815 F.2d 686, 688 (Fed. Cir. 1987)). The Federal Circuit further clarified this issue by stating that "when determining the patentability of a claimed invention which combines two known elements, the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination." Id. at 1356. As previously stated, the prior references are purposely limited to achieve each of its own individualistic objective by their respective structural integrity. However, Applicant submits that the objective of the present invention is unique to its own, given the foldable/unfoldable thin flexible sheet for selectively deploying an embedded antenna. Therefore, especially in view of the belief that none of the references even remotely suggest

² The Federal Circuit explicitly stated that "an examiner must show an un rebutted prima facie case of obviousness." Rouffet, 149 F.3d at 1355. Moreover, "in the absence of a proper prima facie case of obviousness, an applicant who complies with the other statutory requirements is entitled to a patent." Id. In other words, the Federal Circuit intentionally and unequivocally made it clear in the said case to resolve any previous confusion of what standard the Patent Examiners must abide to in making a 35 U.S.C. 103 rejection.

such feature in general, Applicant submits that the prior art lacks the sufficient motivation to combine with each other to create a case of obviousness.

However, even assuming *arguendo*, the Federal Circuit explicitly prohibited "the use of hindsight in the selection of references that comprise the case of obviousness." Id. at 1358 (citing In re Gorman, 933 F.2d 982, 986 (Fed. Cir. 1991)). More specifically, the Federal Circuit required that the examiner must show reasons that the person of ordinary skill in the art, when "confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed." Id. at 1357. Thus, Applicant submits that the prior art which does not even remotely suggest a foldable/unfoldable thin flexible sheet used for selectively deploying an embedded antenna should not serve as the foundation for the creation of such unique feature of the present invention.

Applicant respectfully submits that amended base Claim 1 is novel and unobvious in view of the cited prior art, and thus allowable. Insofar as the amended independent Claim 1 is believed to be allowable, its dependent Claims 2 and 4-28 are also believed to be allowable as they are further limitations of amended independent Claim 1.

For the foregoing reasons, Applicant respectfully requests reconsideration of the rejections under 35 U.S.C. Sections 102(b) and 103(a).

Request for Allowance

On the basis of the foregoing, Applicant respectfully submits that all the stated grounds of rejections have been overcome, and that Claims 1-2, 4-41 and 44-67 are in condition for allowance. An early Notice of Allowance is therefore respectfully requested.

Should the Examiner have any suggestions for expediting allowance of the application, the Examiner is invited to contact Applicant's representative at the telephone number listed below.

Respectfully submitted,

Date: Jan 27, 2004

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